Protocols for Smolt Monitoring Facility Operations
John Day Dam

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1. **General.** The following protocols will be implemented by agencies conducting research in the John Day Dam Smolt Monitoring Facility. These protocols were coordinated with fish agencies and tribes through the Fish Passage Operation and Maintenance Coordination Team (FPOM). The purpose of these protocols is to provide precautionary measures to limit delayed mortality resulting from stress when handling fish.
    - **a.** Sample rates should not exceed 25% unless collecting fish for research when temperatures are less than 70˚F.
    - **b.** The Corps reserves the right to terminate trapping operations at any time.

2. **General requirements for SMF users.** All personnel conducting research or monitoring in the SMF will implement the following requirements.
    - **a.** Users must have appropriate documentation for conducting research at the dam. (See Guide for Researchers at John Day Dam).
    - **b.** Users must have valid state and federal permits that cover all listed species passing the project during the trapping period and users shall comply with all fish handling conditions in the permit. **Note: If permit conditions are more restrictive than the following protocols, users must follow permit conditions.**
    - **c.** Hard hats are to be worn outside at all times.
    - **d.** Long pants or raingear are to be worn at all times. Shorts or sweats will not be permitted in the lab.
    - **e.** Steel-toed shoes or rubber boots are to be worn at all times. No tennis shoes or sandals will be permitted.
    - **f.** If users supply project biologists with a season schedule, it will not be necessary to notify project biologists upon arrival and departure.
    - **g.** Users may coordinate with smolt monitoring personnel regarding sample rates.
    - **h.** Users are permitted to routinely operate flushing valves and release pipes/valves within the monitoring building.
    - **i.** Any modifications to the building or equipment will first be approved by The Dalles/John Day/Willow Creek Project through Project Fisheries.
    - **j.** All anesthetic water is to empty into the activated charcoal filters tanks.

3. **Operation in sample mode (normally fish passage season)**
    - **a.** Smolt monitoring personnel will operate the sampling facility as part of the smolt monitoring program and to collect fish for regionally approved research.
    - **b.** Research updates and equipment or sampling trouble reports will go through the project biologists to the FPOM Coordination Team.
    - **c. Sampling shall cease when temperatures meet or exceed 70˚F.**
        - **i.** Condition sampling may occur twice a week. Mondays and Thursday are preferred.
        - **ii.** The switchgate will be the point at which flow will be diverted.

iii. Collection size will be reduced to 100 fish.
iv. Collected fish will be sampled hourly.
v. Sampling may resume when daily average temperatures drop below 69.5˚F.
vi. Project biologists will use the Corps temperature data logger (Hobo) as the official temperature.
vii. Temperatures are taken as both instantaneous readings and 0000 to 2400 daily averages.

d. If there is a need to sample at temperatures above 70˚F, coordination with FPOM will be initiated by the researcher.

Deleted: These temperature criteria are what The Dalles/John Day/Willow Creek Project considers to be the most appropriate for protecting threatened and endangered species.

4. Operation in bypass mode.

a. All rotating gates will be set to bypass.
b. Project Biologists will inspect the facility every two hours.
c. If the full-flow PIT tag detector is found to be effective the switch gate will be moved to bypass.

5. System failures

a. Any system failure or abnormality will be reported to a project biologist immediately. If a project biologist is unavailable, the control room will be contacted at ext. 4211.
b. If a problem with either the 2 way or 3 way rotating gates (e.g. stuck open or partially open) is discovered, the response protocol should be as follows:
i. Contact the project biologist, or if that is not possible, the control room operator. Project personnel (SMF Bio) will request maintenance crews. Repairs should commence within 4 hours of discovering the problem.
ii. Once all fish safety issues have been addressed and repair requests made, the problem should be thoroughly documented in writing and that information e-mailed to Project biologists prior to sending to other interested parties.